

Fig. 1.

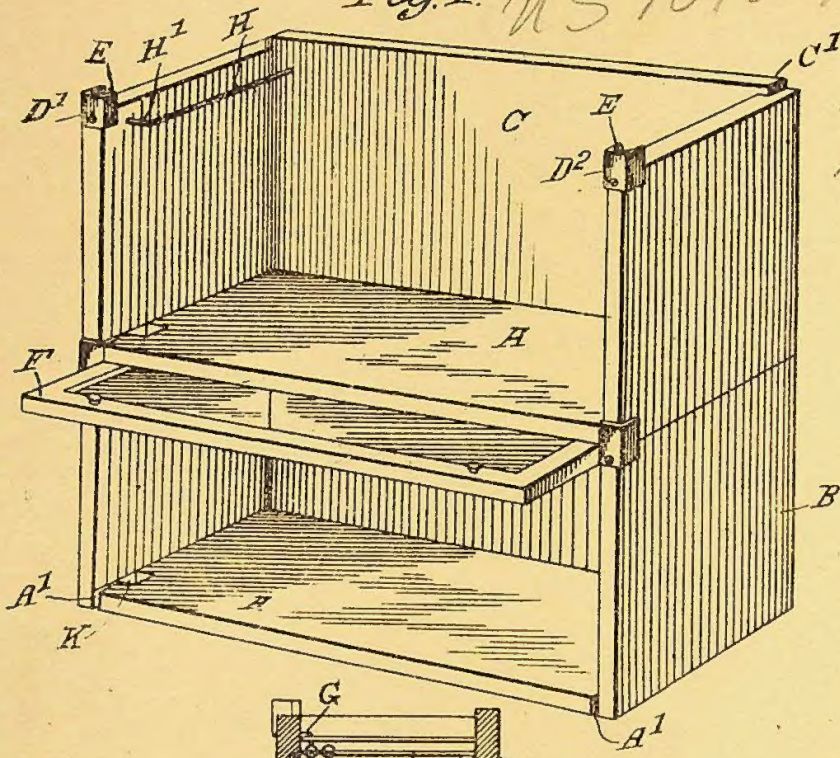


Fig. 2.

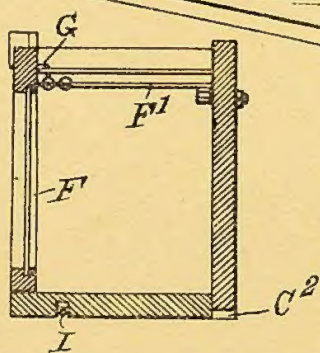


Fig. 3.

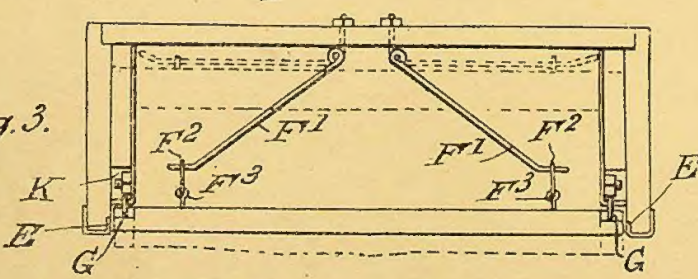
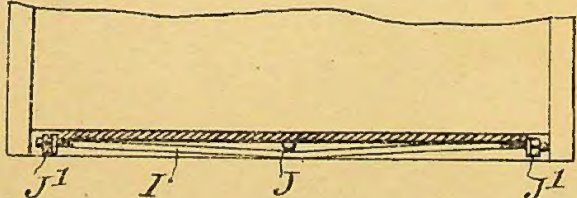


Fig. 4.



[This Drawing is a reproduction of the Original on a reduced scale.]



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N° 2403



Book Cases, Knickerbocker  
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DUPLICATE  
A.D. 1901

Date of Application, 4th Feb., 1901—Accepted, 11th May, 1901

COMPLETE SPECIFICATION.

Improvements in Sectional Bookcases.

I, PHILO WILLIAM CASLER, of Little Falls, in the County of Herkimer, in the State of New York, in the United States of America, Manufacturer, do hereby declare, the nature of this invention, and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statements:—

This invention relates to that class of bookcases which are built up of a number of separable compartments adapted to rest one on top of the other, and the object of the invention is provide a simple and durable bookcase of this kind.

The invention consists in certain novel features of construction which will be hereinafter fully described and finally embraced in the clauses of the claims.

Referring to the accompanying drawing—

Fig. 1 is a perspective view of my improved bookcase showing two sections thereof with the door of the upper section removed.

Fig. 2 is a vertical cross section of the lower section as it appears when the door is closed.

Fig. 3 is a top plan view of the lower section, the dotted lines indicating the door and its connecting parts in a horizontal position.

Fig. 4 is a longitudinal section of the shelf or bottom of the section, showing the truss support or straightening device, whereby the bottom of the section may be straightened when it sags down from the weight of the books placed upon it.

Similar letters refer to similar parts throughout the several views.

A represents the bottom, B the sides, and C the back of the sections, each section being open at its top and front.

The back of the sections are made as to provide at its upper portion a tongue C<sup>1</sup> adapted to fit into a recess C<sup>2</sup> situated in the lower portion of the back of the adjoining section. This interlocks the back of the sections, and prevents an upper section from sliding rearwardly. It also provides a dust-proof joint between the sections.

D<sup>1</sup>, D<sup>2</sup>, represent two guard plates which project from the upper front corners of each section. These guard plates are provided with inwardly turned tongues E adapted to engage two vertical slots A<sup>1</sup> cut in the bottom of each section adjacent to the sides thereof. The guard plates are adapted to receive the lower corners of the adjoining section and guard against lateral displacement of the sections. The inwardly turned tongues preventing the upper forward portions of the section from spreading apart when books are crowded between the sides of the sections.

F represents a swinging door which is suspended from the upper side portion of the sections by means of two hooks G secured to the inner side of the door and engaging the angular bends H<sup>1</sup> in two horizontal rods H running parallel to the sides of the sections. The main portions of these rods provide bearings and supports for the door when the same slides back in a horizontal position as indicated by the dotted lines in Fig. 3. The operation of the door being, first, to swing upwardly and then slide inwardly underneath the bottom of the adjoining section. In order to facilitate the sliding motion of the door, I connect same with two spring arms F<sup>1</sup> which are secured to the back of the sections. The forward portions of these arms are loosely connected to the upper portion of the door by means of links F<sup>2</sup> which engage eyelets F<sup>3</sup> secured to the inner side of the door. These links prevent any binding of the arms and causes same to

[Price 8d.]



*Cusler's Improvements in Sectional Bookcases.*

operate in perfect unison. By having the spring arms connected with the door at some distance below the point at which the door is suspended the door drawn shut when lowered towards a vertical position.

For the purpose of preventing the bottom of shelf portion of the section from sagging, I provide same with a truss support, comprising a rod I extending substantially from one end of the shelf to the other and having a central depending portion which engages the central portion of the shelf through an intermediate supporting block J. The tension of this rod is adjusted by means of a nut which engages the threaded end portion of the rod. By tightening the rod same will tend to straighten and by so doing will force the central portion of shelf up and overcome any sagging of the shelf.

In order to obviate any objectionable obstruction the under side of the bottom is provided with a longitudinal groove which accommodates the rod. The bottom is further provided with openings K through which a wrench may be inserted for turning the nut J<sup>1</sup>.

I do not desire to limit myself to the particular construction herein shown and described, as I am aware that some changes may be made therein without departing from the spirit and scope of my invention. For instance the guard plate might be secured to the lower corners of the sections and project downward as to engage the upper corners of the adjoining section. The spring arms may be substituted by spiral springs or other actuating devices.

While I have described the above features of construction in connection with separable bookcases, it is evident that they may be used with advantage in connection with other structures. The truss support, may be used for other forms of shelves, also the swinging door.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

1. A bookcase comprising two or more sections adapted to be placed one on top of the other, each section having at their upper front portions upwardly projecting guard plates adapted to receive the lower front corners of the adjoining section, said guard plates being provided with inwardly turned tongues, the bottom of each section being provided with slots adapted to receive said tongues substantially as described.

2. A bookcase comprising two or more opened topped sections adapted to be placed one on top of the other, each section being provided with projecting guard plates adapted to receive the corners of the adjoining section, means for preventing the upper portion of the sides of the sections from spreading apart, substantially as described.

3. A bookcase comprising a box or crate having an open front, a door suspended in said front portion adapted to swing upwardly and then slide rearwardly, a spring secured at one end of the rear portion of the crate and at the other end to the said door, said spring being adapted to draw the door rearwardly when brought to a horizontal position, substantially as described.

4. In combination with a shelf, a straightening and supporting device comprising a tension rod extending substantially from one end of the shelf to the other and having a depending central portion engaging the central portion of the shelf, means for adjusting the tension of the said rod, substantially as described.

Dated this 4th day of February 1901.

WHEATLEY & MACKENZIE.  
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